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NPIC/P&DS/D/6-___
1 June 1966

MEMORANDUM FOR THE RECORD

SUBJECT: Visit to [redacted] Regarding Contract [redacted] 25X1 25X1

1. On 18 May the undersigned visited [redacted] 25X1 for the purpose of observing progress on the [redacted] Contract and to discuss plans for a follow-on effort for FY-1967. 25X1 25X1

2. Several laboratory experiments were observed: one concerning a new film formulation that is blue in appearance, seems to band well to a mylar base, and exhibits fairly good density characteristics. The obtained sample has a D-maximum of about 1.25 with a reasonably low fog density. Observation of a density step wedge through a blue filter (for color equilization) beside the sample film appears to reproduce about 8 steps of the 21 step density wedge. [redacted] is preparing some density step wedge exposures of this material to be included with a proposal for follow-on FY-1967 effort. Another of the characteristics of this material demonstrated in the laboratory was resolution. A resolution target was exposed and projection printed on paper through a microscope. The projected print showed a resolution capability in excess of 200 lines/mm; but because of the reproduction and reading methods involved in the experiment, the ultimate resolution could not be determined at this time. NPIC will receive samples of exposed resolution targets at a later date. One unsolved problem of this material is a method for retaining the image. Heat treatment will 25X1

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allow retention for a few days under normal room lighting or for viewing with low light projectors, but intense light will cause it to bleach out. Further experiments are to be conducted in an effort to solve this ~~xxxx~~ problem. A stripping overcoat on the film to remove the chemical responsible for the bleaching may be required. The material can be exposed in a few seconds using a standard 300 watt projection lamp. The material shows promise and should be further investigated.

3. The parameters concerning a proposal for an FY-1967 effort were discussed. In general the criteria will be as previously reported in the NPIC memorandum of 8 February 1966, regarding a conference held to determine interim objectives, that is, a D-maximum of 2.0, a D-minimum of 0.10; a density range of 11 steps of the standard 21 step density wedge; a resolution of 200 lines/mm; and exposure time not to exceed 30 seconds. In has been found that exposure (bleaching) is effected by temperature. This phenomenon may be useful in controlling gamma or contrast. A proposal for continuation of this effort in FY-1967 should be here about 15 June 1966.

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